2 PROJECT PLANNING

This project planning guidance provides information necessary for identifying planning assumptions, project phases, milestones, and performance measures. This information is fundamental to the development of the environmental restoration (ER) project life-cycle baselines. The baseline reflects the ER project mission, objectives, cleanup strategy, characterization requirements, and specifications in order to define, execute, and control the project scope of work, schedule, and cost.

2.1 PLANNING ASSUMPTIONS

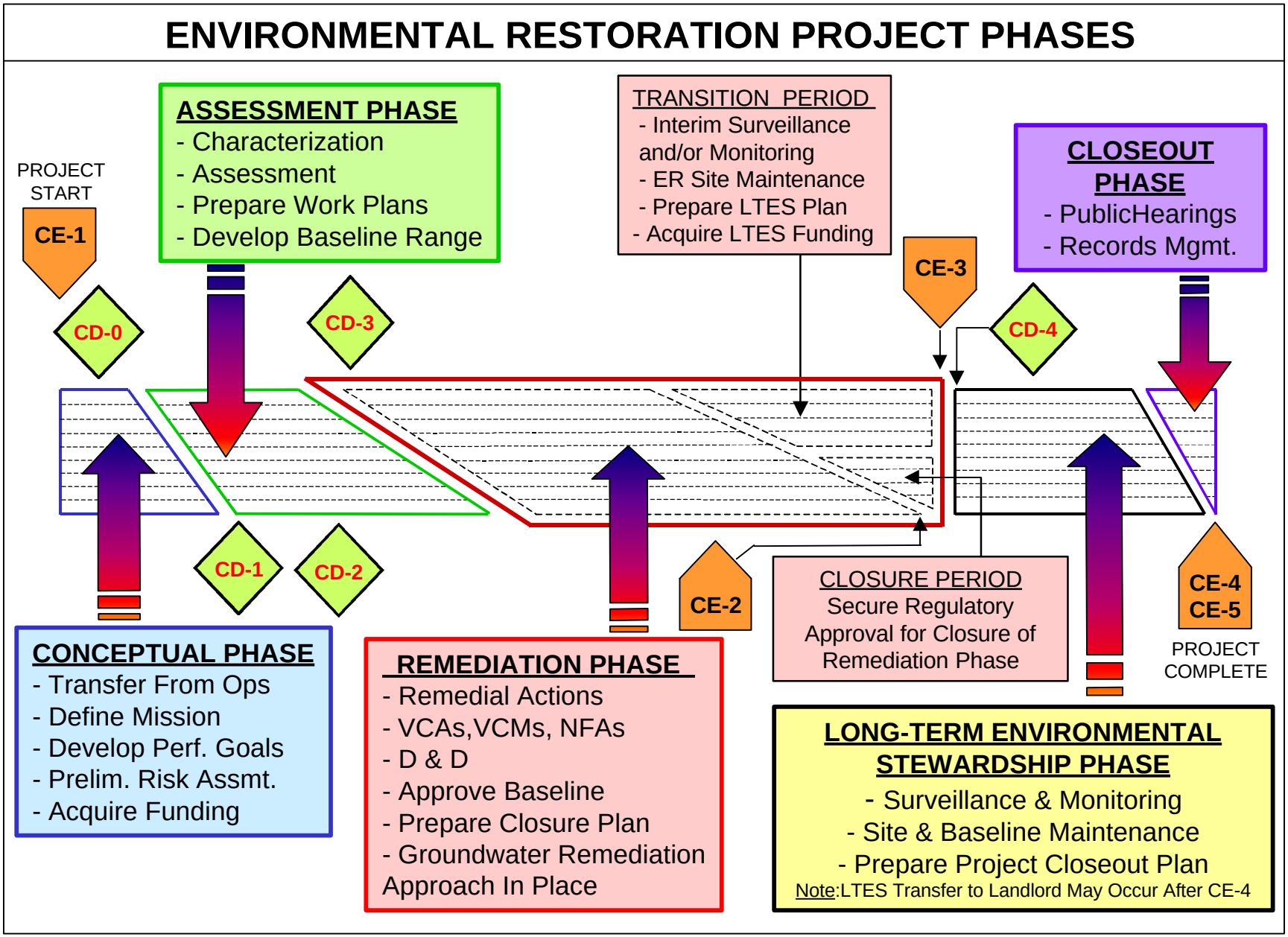
Planning for ER projects must be based on realistic and understandable assumptions. These assumptions are necessary for properly determining the total work scope and realistic goals and objectives. The requirement that all ER projects comply with all federal and state environmental laws is essential in determining the technical scope of work. The task of bounding this scope requires that all ER projects within the AL complex are planned according to the "most-likely-case." This assumption eliminates several unrealistic scenarios that could significantly increase the scope of work which also increases the cost and schedule.

The DOE, regulator, and contractor must agree on the planning assumptions before execution of the ER project baseline. The following are a few of the planning assumptions, which must be resolved prior to establishing the baseline:

1. Extent of Assessment and Characterization
2. Use of Expedited Cleanups (VCAs, VCMs, Administrative NFAs)
3. Regulatory Review Period
4. Remediation Strategy
5. Deactivation and Decommissioning (D&D)
6. Long Term Environmental Stewardship (LTES) Strategy

These assumptions must be elaborated on in a formal document such as the Programmatic Assumptions Document (PAD), which is part of the required baseline documentation (see Section 3.3).

Figure 2.1 Project Phases



2.2 PROJECT PHASES

In the late 1980's, the DOE's mission changed to include environmental restoration (ER) and waste management. It was necessary to develop a new set of project management procedures to provide guidance for planning, executing, and managing DOE's new missions, especially for ER projects. A stronger concept of life cycle planning was implemented which includes a sequence of developmental phases, marked by strategic milestones, that map the progression of the project. These milestones are referred to as Critical Decisions (CDs) and are defined in DOE Order 413.3 and accompanying Manual and Practices (see Appendix C). Additionally, the ERD tracks milestones referred to as Critical Events (CEs) that help distinguish each project phase and define important stakeholder interface points.

The ER project phases are more difficult to clearly define than those in more traditional construction projects. For example, the start and end of the assessment phase of an ER project is not as clear cut, as the start and end of the preliminary design phase in a typical construction project. Figure 2.1 illustrates the relationships between the ER project phases and the CDs and CEs and can be used as a model for most ER projects. Table 2.1 provides definitions for the phases and milestones. All ER projects move through different phases or periods as they progress to completion. Nontechnical reasons can also cause ER projects to enter different phases or periods, such as when project ownership changes, as can occur during a transition period, or when funding sources change. Normally, an ER project consists of a conceptual phase, an assessment phase, a remediation phase, a transition period, a closure period, a long term monitoring phase, and a closeout phase (see Figure 2.1).

Table 2.1 Critical Events and Strategic Planning Milestone Definitions

Project Phase	Critical Event or Milestone	Definitions	Critical Decisions	Critical Events	IPABS Critical Closure Path
CONCEPTUAL	**Start Project**	Project transfer From Operations Program		**CE-1**	**YES**
	Approve Mission Need	Define project mission, performance goals, and funding request approved	**CD-0**		
ASSESSMENT	**Approve Baseline Range**	Project technical scope defined, prepare life cycle cost estimates, and develop resource loaded schedule and initial baseline range approved	**CD-1**		
	Approve Performance Baseline	Completion of all assessment activities, that result in the final Record Of Decision (ROD) for CERCLA projects or the final Statement Of Basis (SOB) for RCRA projects, and approve the performance baseline	**CD-2**		
REMEDIATION	**Start Remedial Actions**	Approve Start of Construction and/or Remedial Actions	**CD-3**		
	Complete Cleanups	Completion of all cleanup activities and submittal of documentation proposing No Further Action (NFA) for the last operable unit (OU-CERCLA) or potential release sites (PRS-RCRA) for the project.		**CE-2**	
	Complete Remedial Actions	Transition Period: Completion of all remedial actions (including approval of a project transition, closure, and/or longterm surveillance and monitoring plan) and receipt of a permit modification which removes the final PRS (RCRA) or site delisting from the CERCLA/NPL.		**CE-3**	**YES**
	Project Turn-Over	Closure Period: Successful transfer of all Long-Term Surveillance and Monitoring (LTS&M) functions and fiscal responsibilities to the site Landlord or other performing operational organization.	**CD-4**		
LONG TERM ENVIRONMENTAL STEWARDSHIP	**Complete LTES**	Completion of all operations which meet all LTSM requirements in accordance with current environmental regulation and policy.		**CE-4**	
CLOSEOUT	**Complete Project**	Completion of all administrative, operational, and closeout activities along with direction from DOE Headquarters to close the project.		**CE-5**	**YES**

2.3 MILESTONES AND PERFORMANCE MEASURES

ERD project planning must be consistent with DOE Headquarters strategic planning and flow down from DOE/EM goals and objectives. During project planning, the DOE and contractors formulate objective and quantifiable baseline milestones. The contractors will report progress against these milestones on a monthly and quarterly basis, as described in Section 4.0. Some of these same milestones may also be called out as other types of milestones or performance measures, such as management commitments, or summarized to higher level milestones or performance measures, such as GPRA milestones. Milestones or performance measures have different levels of control and can be specific to a singular year or be applicable to multiple years. Regardless of what type of milestone or performance measure is identified and whether or not it is summarized to higher level milestones, the contractor's baseline is the source of this information. It is therefore important for the contractor and ERD to have a clear understanding of the baseline milestones. Table 2.2 below includes the majority of milestones/performance measures that pertain to ERD, the controlling organization, and the year for which the milestone/performance measure is developed.

Table 2.2 Milestones and Performance Measures

Milestone or Performance Measure	Control Level	Affected Year
Secretarial Agreement Milestones with President	President	Current fiscal year
GPRA	Congress	Current fiscal year
Critical Decision	DOE-HQ/EM	Multiple
Enforceable Agreement Milestone	Regulator	Multiple
Management Commitment	DOE-HQ/EM	Current fiscal year
Budget Milestone	DOE-HQ/EM	Budget Year
Critical Event	ERD	Multiple
Critical Closure Path Milestone	ERD	Multiple
Baseline Milestone	ERD	Multiple
Contractor Performance Measure (contractual)	ERD	Current fiscal year

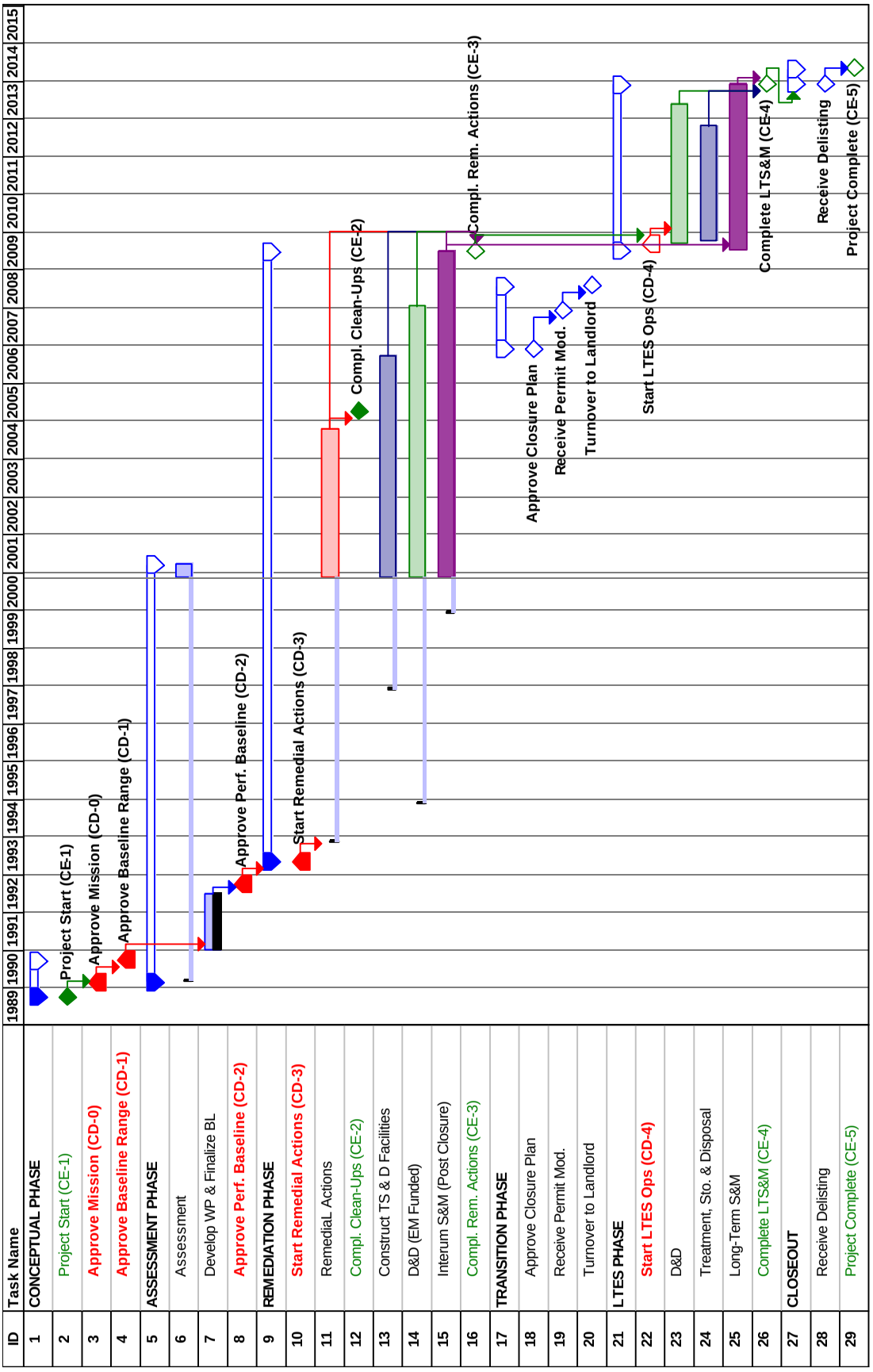
All major ER project milestones have various levels of DOE and contractor control associated with them. The DOE-controlled milestones correlate with the baseline change control levels 0, 1, and 2. The DOE CD milestones are examples of DOE-controlled milestones that must be included in the ER project baseline. All major milestones must be clearly defined. Table 2.1 provides definitions and completion criteria for all CDs and CEs. The DOE and the contractor must have a mutual understanding of acceptance or completion criteria for all DOE-controlled milestones. Contractor established and controlled milestones should also be defined with completion criteria to avoid duplication or confusion. Control and status reporting is the key to comprehensive baseline schedule management.

In addition to DOE-controlled CDs and CEs, the contractor is expected to identify other major milestones within the project schedule. Included are management commitment milestones, enforceable agreement milestones, critical closure path milestones, and other important milestones that the contractor needs to manage the project (See Glossary for definitions). Milestone descriptions, beginning with a verb; completion criteria; and planned dates will be defined, as necessary. Enforceable agreement milestones will not be changed in the baseline until the regulatory agency has concurred with the proposed changes. These milestones will be incorporated into the IPABS-IS and appropriately flagged by milestone type.

2.4 MASTER SUMMARY PLAN (MSP)

Contractors are expected to prepare a Master Summary Plan (MSP) which should be a one page, presentation quality depiction of the relationships between major activities, major milestones, CEs, and CDs throughout the project life cycle. MSP milestones must be consistent with those shown in the most recent submittal of the IPABS-IS and the "Accelerating Cleanup: Path to Closure." The MSP must reflect the ERD definitions for CEs and strategic planning milestones, as described in this section. The MSP must reflect the entire ER project life cycle, from start through completion. The MSP must show progress to date for all major activities at the WBS level 5 (e.g., summary subproject level). The MSP need not be logically tied to the project schedule; however, it must be frequently updated with information from the project schedule. An example MSP is included in Figure 2.2.

Figure 2.2 Master Summary Plan



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